

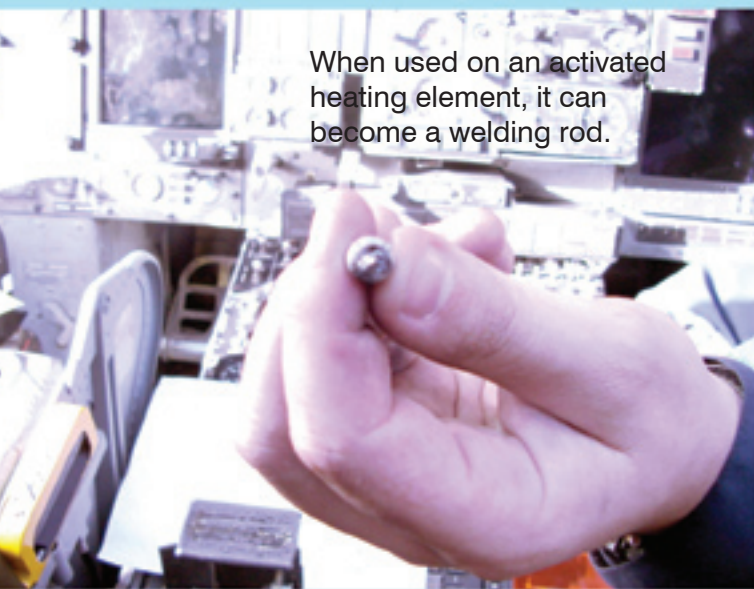


A screw driver is a versatile tool.

*By AE2 Morgan Furlow*

I was sitting in the AE shop, working on required reading for an APU turn-up qualification. I was off duty, but the shop was busy. I wasn't surprised when another AE2 asked me to help him with an op check of the pilot's caution-advisory panel. I had plenty of time, so I went with him. Before the job was over, I would wish I had continued to study for my qualification.

# I Was a Half-Inch From



When used on an activated heating element, it can become a welding rod.



The author learned a valuable lesson about doing "side jobs" and about securing circuit breakers

The op check required aircraft power, so I did a pre-power check. During my check of the aircraft circuit breakers, I paid attention only to those breakers pertaining to the system I was working on. I did scan the rest of the breakers, but nothing stood out. The op check was for the fire-warning light on the pilot's caution-advisory panel, and that check failed. The other electrician went back to the shop to look at the testing and troubleshooting publications. I stayed behind to replace the part and to secure the power on the aircraft.

While finishing that job, an AME asked me if I could help him by removing the sensing-and-heating-element hardware on the copilot's side windscreen. Knowing this task falls within my rate's scope, I didn't see any harm and agreed to help him. I got into the copilot's seat and began my new "side job." Preparing for this task, I pulled a No. 2 Phillips screwdriver from pouch 220-1-3 and started to remove the inboard screw. As soon as the screwdriver touched the fastener on the heating element, I was blinded by a flash of light as 115 VAC, 3

phase, 400 HZ, and 35 amps arced from the heating element. I had thought this system was deenergized, but the charred screwdriver in my hand told me different.


I was surprised to say the least. Aircraft power had shut down because of a system overload, and I noticed the scent of burnt metal in the air, reminding me of my high-school welding class. I examined the tool and found that about one-third inch of the screwdriver's tip had melted off.

I realized two things: I just had turned one

# m Death

of the Navy's screwdrivers into a welding rod and had been only a half-inch away from death. If 115 VAC, 35 amps can turn a steel screwdriver into slag, that amount of power almost certainly is enough juice to turn an AE2 into a corpse.

I took a few seconds to calm my nerves and then checked the aircraft for damage. I found the piece of missing screwdriver had melted onto the head of the screw. With no further damage, I secured aircraft power and went to tell my LPO what had happened.

I learned a few valuable lessons from this experience. I was working on an aircraft without a complete and thorough pre-power check. This was and is unacceptable, and I should have known better. I was working on one discrepancy and allowed myself to get sidetracked on another job. In the process, I did not stop to think through the new task. A can-do attitude and a lax work ethic almost killed me. Had I slowed down, thought through the job, and followed procedures, I could have saved myself a lot of time and trouble. 

Petty Officer Furlow works in the AE shop at VS-41.

## Class B Mishaps 02/07/2003 to 05/18/2003

Aircraft	Command	Date
UH-1N	HMLA-169	02/10/2003
Aircraft was overfueled while pressure refueling.		
F-14B	VF-32	02/21/2003
KC135		02/21/2003
The Tomcat's starboard engine was FODed during in-flight refueling.		
C-2A	VRC-30	03/02/2003
FA-18C	VMFA-314	03/02/2003
Two aircraft parked on ship's elevator were damaged when elevator was moved.		
E-2C+	VAW-113	03/19/2003
An intake cover was ingested during a high-power turn.		
T-2C	VT-86	03/20/2003
A Buckeye's canopy came off during advanced tactical-maneuver training.		
UH-1N	HMLA-269	03/26/2003
Helo made a hard landing after single-engine failure.		
F-14D	VF-213	03/26/2003
The starboard engine FODed during in-flight tanking.		
CH-53E	HMM-161	03/28/2003
Helo's nose gear collapsed while taxiing to tactical FARP.		
FA-18C	VFA-25	03/28/2003
During schedule maintenance, maintainers found an improperly secured panel—several fasteners were missing.		
FA-18C	VFA-94	04/16/2003
Engine anti-ice duct disconnected, causing heat damage and an engine FOD.		
P-3C	VP-9	04/23/2003
Aircraft struck light pole with right wing while taxiing.		
T-34C	NAVFORAIRSTRON	04/29/2003
Mentor executed a gear-up landing at NOLF.		
F-14D	VF-2	05/08/2003
Port engine FODed on maintenance turn.		
T-38A	NAVY TEST PILOT SCHOOL	05/09/2003
Two aircraft damaged from lightning and hail.		